

the bowels, the mucous membrane being prolapsed, a florid granular surface, from which blood freely oozed, was observed; it was about the size of a shilling, and slightly raised from the surrounding tissue; it was very painful when touched; the finger introduced into the rectum did not detect any tumour. The treatment adopted was at first small doses of mercury with chalk, and extract of taraxacum, aperients every second morning, subsequently tonics, with nitric acid, and various preparations of iron; enemata of cold water were used, afterwards astringent fluids. Examination of the urethra detected a stricture, through which a No. 3 catheter was passed with some difficulty; the introduction of instruments twice a week was had recourse to, the size being gradually increased, till the natural calibre of the urethra was restored. By perseverance in the remedies, his general health was much improved, the countenance became clear, the pain in the region of the liver subsided; but though feeling much better, the bleeding from the rectum continued. Having given medical treatment a fair trial without much benefit to the local disease, I deemed the application of nitric acid advisable. The bowels having been freely moved by extract of colocynth and blue pill taken at night, and an enema administered the following morning, the florid granular surface of the pile was exposed by a speculum, and freely touched with strong nitric acid, chalk-and-water being subsequently used to neutralize the excess of acid, and prevent injury to the surrounding tissue. After the operation, a dose of laudanum was administered. On the third day, the bowels were moved by castor oil; for some days subsequently he experienced smarting when at stool, but the pain gradually lessened. He was directed always to use enemata of cold water after defecating. It is now four years since I attended this patient, and he has not had the slightest return of any of the symptoms he previously suffered from.

Internal hæmorrhoids, producing severe pain in the back, down the thighs, treated by nitric acid.

Mrs. W—, aged thirty-nine, the mother of seven children, during her pregnancies suffered much from constipation, the bowels not acting for several days, and when relieved attended with much pain and straining. About three years previous to consulting me, her appetite became capricious; sometimes she ate voraciously, at others experienced an entire distaste for food; she frequently had heartburn, and was much troubled with flatulence. The bowels being excessively obstinate, she often had recourse to purgatives; defecation was attended with smarting pain and loss of blood, but the most distressing symptoms were severe "dragging" pain in the lower part of the back, acute spasmodic pain down the inside of the thighs and frequent cramps in the legs; the catamenia were irregular, and her symptoms were much aggravated at these periods. Her countenance was dull, the tongue large and flabby, with the impressions of the teeth deeply indented in its edges; the pulse feeble; the abdomen was much distended, and percussion indicated a loaded condition of the colon; digital examination of the rectum produced pain in the left side; examination by the speculum ani showed the mucous membrane to be elevated at the part and the surface granular and florid; the pouch of the rectum was filled with indurated feces. Enemata administered by O'Beirne's tube were first had recourse to, so as thoroughly to unload the bowels, afterwards aperients, alteratives, and tonics were prescribed; and half a pint of water, containing thirty grains of tannic acid, were injected into the bowel each day after defecation. Under this plan some improvement took place, but the pain down the thighs and in the back, also in the rectum on the passage of a motion, continuing undiminished in intensity, it was proposed to apply the nitric acid to the pile. The operation was performed, and she was shortly afterwards entirely free from all the uneasiness and discomfort she had endured.

Internal piles; great loss of blood; extreme debility; palpitations; constant headache; nitric acid applied to hæmorrhoidal excrescences.

Mary S—, aged thirty-one, unmarried, of slight conformation; has never enjoyed very good health; has not taken much exercise from feeling fatigue after slight exertion; from childhood has suffered from constipated bowels, which at times were not relieved for five or six days; catamenia always scanty, and attended with severe pain in the back; has had leucorrhœa for some years. First had symptoms of hæmorrhoidal disease about the age of twenty; she then experienced a sense of fullness in the rectum, and pain when the bowels acted; also lost a small quantity of blood. She continued in the same condition for seven or eight years. Her symptoms then became much

aggravated, and the amount of blood lost at stool considerably increased, which so reduced her strength, that when she consulted me, she could scarcely walk across the room. She complained of having palpitation of the heart on making the slightest exertion, and had constant headache, which was increased by the erect posture, and relieved when lying down; her feet and legs were œdematous; the bowels seldom acted without aperients, and defecation was attended with severe pain. Her countenance was sallow and blanched; her lips and gums pale; tongue coated; pulse quick and irritable. The rectum being prolapsed, two hæmorrhoidal excrescences were observed, one on each side, that on the left side being somewhat more than an inch in diameter, the other not quite so large; their surfaces were florid and granular. From the great effect produced on the constitution, and the condition of the piles, it was deemed advisable to remove the local disease as soon as possible; medicines were prescribed, and enemata used to remove fecal accumulation, and to improve the general health. When this plan had been pursued for about a week, nitric acid was freely applied to the morbid tissue, the bowel having been previously prolapsed by the administration of an enema. An alkaline solution having been used to neutralize the excess of acid, the bowel was then smeared with olive oil, and replaced. The acid caused severe pain for about two hours, it then decreased, and she slept well during the night. On the second day from the operation, the bowels were relieved without medicines, and only slight pain attended their action; two days afterwards, the skin being rather dry and hot, she took three grains of blue pill, and one of ipecacuanha, and twelve drachms of compound gentian mixture; the bowels were freely relieved, and the slight febrile action removed. After this, the bowels were kept free by mild aperients; and half a pint of water, containing two scruples of alum, was injected each day. At the end of ten days she was directed to use cold water only. She now experienced no pain at stool, nor lost any blood; for two months subsequently she took twice a day a draught, containing five grains of the ammonio-citrate of iron, twenty minims of aromatic spirit of ammonia, a drachm of quinine wine; syrup, a drachm; water, ten drachms. She also took a teaspoonful of cod-liver oil with each draught. At the expiration of this time she had gained a considerable amount of flesh; her countenance and lips no longer indicated a deficiency of blood; she was free from headache and palpitation, and was able to enjoy exercise; the leucorrhœal discharge had nearly ceased, and the catamenia had become more natural in character.

(To be continued.)

ON A CASE OF POISONING BY SULPHATE OF ZINC; RECOVERY.

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ON Sunday, the 13th of April, I was hastily summoned to see Mrs. S—, a married lady, aged twenty-two years, residing in a street in the rear of University College Hospital, who had accidentally taken poison. She had been ill with scarlatina the fortnight previous, and was just convalescent, having sat up the last three days, but she was in a feeble state of health, and could barely crawl across the room.

She was taking a colourless mixture in an eight-ounce bottle, in the dose of a wineglassful, which lay upon the mantelpiece. Close to or alongside of it was another eight-ounce bottle of the same coloured glass, which contained a strong lotion of white vitriol, which the lady's husband was in the habit of using to remove spots from his face. The bottle of lotion had three labels upon it, which were quite conspicuous, thus: "POISON," "For Outward Use," and "Not to be Taken," being respectively placed at the top, middle, and bottom of the flat side of the bottle. At a quarter past twelve o'clock of this day, the nurse gave the lady nearly a wineglassful of the lotion in place of her ordinary mixture; it was entirely swallowed, and the discovery was immediately made by the lady, from the peculiarly disagreeable bitter taste after taking it, that the wrong medicine had been given her. The greatest consternation prevailed, and medical aid was immediately sought for.

In the meantime an emetic of salt-and-water was administered without effect; then some melted butter was given; and, finally, an emetic was procured from a chemist, who did not see the patient, consisting of two grains of tartarized antimony, and ten grains of powdered ipecacuanha; this was given a quarter of an hour after the poison, but without effect. Vomiting, however, occurred; but not until the finger was applied to the root of the tongue, and only once did this act take place.

On my arrival at one o'clock, all the particulars of the case were related to me, and I found the lady had taken a powerful dose of sulphate of zinc; and from the history of the lotion given by the lady's husband, I was enabled approximately to guess the quantity of the salt in the fluid she had swallowed. It was now three quarters of an hour after taking the poison. She was in a state of great nervous anxiety and depression, sitting in an easy chair. She complained of a burning sensation in the stomach; but not so violent as it had been. Much thirst and dryness of the mouth were present; but slight thirst had, however, existed before taking the poison. She outwardly shivered, and had slight quivering of the lips. Her hands were covered with a cold clammy perspiration; but they felt to herself quite hot, and she seemed anxious to get hold of anything to cool them. The pulse was 104, weak, and small; the pupils were much dilated, and the eyes staring; but this became less marked in the course of a few minutes, on reassuring her as to the safety of her life.

From what had been already unfortunately administered, my only resource was to apply a remedy which would chemically decompose the poison and render it inert; and I at once prescribed a scruple of the carbonate of potass in half a wine-glass of water, with some aromatic spirits of ammonia. This was given in my presence, and it had the effect of reducing the pulse in the course of a few minutes eight beats. I ordered it to be repeated every fifteen or twenty minutes, until a couple more doses were taken, thus making three altogether, which would be equivalent to a drachm of the carbonate of potass. I directed her to lay down on the sofa, and to have hot bottles to her feet and sides should the shivering continue.

Quarter past two P.M.—I found her sitting up, and much better. She had had a short sleep on the sofa. The burning heat complained of in the stomach had now descended to the lower part of the bowels, where it was very severe. Thirst was still urgent, and the tongue and mouth were very dry; the pulse was 100, and weak; no vomiting had occurred. I considered it prudent to enjoin quiet, and to order a strong decoction of tea to be used occasionally as a drink.

Half-past eight P.M.—Found her free from any burning sensation or pain. She had an evacuation from the bowels at six P.M., since which time she had been quite relieved from any unpleasant sensation; not now so thirsty; pulse 76, a little stronger, but still weak. The strong tea seemed to refresh her very much indeed. The heat had returned to the entire body; and she had actually partaken of a little roast mutton. She was, therefore, quite convalescent.

On seeing her some days after, she had experienced no unpleasant symptoms whatever—in fact, her strength had increased considerably.

Analysis of the poison.—The bottle contained four fluid ounces of clear fluid, very slightly turbid on shaking. It had a styptic, slightly metallic taste; was feebly acid; specific gravity 1012.

One fluid ounce, evaporated to dryness, yielded ten grains and a half of a clear white semi-crystalline salt—sulphate of zinc.

The following liquid tests were applied:—

Ammonia, threw down a white precipitate, soluble in excess of the alkali.

Sesquicarbonate of ammonia, a copious heavy white precipitate, soluble in a large excess of the precipitant.

Carbonate of potass, a very copious heavy white precipitate, insoluble in excess of the precipitant.

Bicarbonate of potass, a very copious thick, white, heavy, gelatinous precipitate, not soluble in an excess of the test.

Ferrocyanide of potassium, a white milky precipitate.

Sulphuretted hydrogen gas, a white milky precipitate, not well marked.

Chloride of barium, a heavy white precipitate, thus showing the presence of a sulphate.

Phosphate of soda, a white flocculent precipitate, not soluble in excess of the precipitant.

Bright metallic copper was not affected by boiling in the tested fluid.

Milk and albumen produced a very slight flocculent precipitate.

Without dwelling upon the chemical evidence of the nature of the poison, it will suffice to say, the unmistakable presence of sulphate of zinc in the lotion was quite positive. None of the vomited matter could be obtained; it was quickly thrown away by the nurse.

It will be at once apparent, from the quantity of zinc yielded by an ounce of the fluid, that it would be quite insufficient to produce symptoms of poisoning. The following strange facts, however, will sufficiently explain them:—The eight ounces of lotion contained one ounce of sulphate of zinc, bought of a respectable chemist, who cautioned the husband to be very careful of it, and who knew at the same time the purpose for which it was wanted. About this quantity in the lotion, I have been satisfied on the best and clearest evidence. Each fluid ounce, therefore, of the lotion contained one drachm of the salt; upwards of an ounce of the lotion was drank—say nine drachms. The quantity consequently taken was sixty-seven grains of the sulphate of zinc.

It appears that when the lotion was given by mistake to Mrs. S—, the nurse—for what reason has not been explained—took at the same time nearly a similar quantity herself. She moreover rapidly emptied a portion of the lotion into a vessel, partially filled the bottle with water, and scraped off two of the labels. This explains the small quantity of zinc yielded by a fluid ounce as compared with the quantity actually taken by the lady. The nurse, it seems, was the person who went to the chemist's who gave the emetic for her mistress, and whilst at the chemist's, she was seized with great præcordial uneasiness, and copious vomiting in his shop. This further accounts for the agitation and restlessness which she evinced on the occasion of my first and second visits, more especially the first.

With respect to the *treatment*. I had two objects in view: the first, to neutralize the effects of the zinc, whose activity was increased by the salt-water emetic, which, together with the other substances given, arrested its emetic properties. The second was to remove the depression consequent upon the tartar emetic. The first was accomplished by a drachm of carbonate of potass given in divided doses with a mild diffusible stimulant, which completely effected its purpose; the burning heat in the stomach gradually disappeared, and descended to the lower bowel, and there passed off by stool. The effects of the tartar emetic were removed by the exhibition of strong tea, given after the sulphate of zinc was rendered completely inert by becoming converted into the insoluble and harmless carbonate.

Altogether the case is peculiar, not so much from the quantity of zinc swallowed,—which, had things been allowed to take their natural course, would have been got rid of by the vomiting it would have most certainly produced,—but from the behaviour of the nurse, whose conduct throughout must alone be attributed to the fright of the consequences of her imprudence. The delicate health of the lady rendered her more liable to be dangerously affected than if she had been otherwise well.

It is unnecessary to extend the case by reference to authorities, as to the quantity of sulphate of zinc which may destroy life, as that depends so much upon circumstances. The present, however, is sufficiently interesting to place upon record.

Guildford-street, Russell-square, May, 1856.

STREET VEHICLES AND INFECTIOUS DISEASES.—At the request of Sir G. Grey, Bart., Mr. Guy, a member of the profession, has brought the subject of "Street Vehicles and Infectious and Contagious Diseases, &c.," under the more earnest attention of the Legislature, he has laid before the Home Office some very excellent suggestions for remedying the exceedingly alarming evil. Mr. Guy in the first place proposes a fine on all persons who shall convey dead bodies, or persons afflicted with small-pox, scarlet fever, or other such contagious diseases, in public vehicles, mourning coaches included. He then urges that the hospitals for the reception of such patients should keep proper conveyances for the sick, and that the government might readily allow the ambulances from the Crimea to be set aside for such purposes. Mr. Guy would have all cabmen supplied with a book of certificates to be signed by persons sending other patients to the metropolitan hospitals, not suffering from contagious diseases, and he would always have them liable to give their horses for the use of the ambulances. All the suggestions but the latter have been well received by Sir G. Grey—that one too severely infringing on the liberty of the subject.